

TENTATIVE PROGRAMME ICUDBE 2017 (Note: The tentative is subject to change)

Theme : Universal Design and Accessibility in Health, Education, Social, Disaster Risk Management and Advocacy

Monday, 6th November 2017

8.30am – 9.10am	Registration of presenter/participant/speaker for day 1 and breakfast
	Session 1A: Theme Universal Design & Accessibility in Disaster Risk Management Moderator – Prof. Ar. Dr. Abdul Razak Sopian (Dean KAED, IIUM)
9.10am – 9.30am	Keynote Speaker 1 – Joseph Kwan (UDA Consultants Ltd., Hong Kong) <i>'Improved Hospitality and Services Industries'</i>
9.30am – 9.45am	Invited speaker – Ar. Mustapha Kamal, 'People with disability and how Sendai Framework for Disaster Risk Reduction 2015 – 2030 accommodated it.'
9.45am – 10.00am	Invited speaker - Mr. Sazali Shaari (MDF), 'Universal Design & Accessibility for the Deaf'
10.00am – 10.15am	Arrival of VIPs and Guest of Honour
10.15am – 10.25am	Welcoming speech by YBhg. Prof. Dato' Sri Ar. Dr. Asiah Abd. Rahim (ICUDBE2017 Chairperson)
10.25am – 10.35am	Introductory speech by YBhg. Prof. Ar. Dr. Abdul Razak Sopian (Dean of Kulliyyah of Architecture and Environmental Design)
10.35am – 10.50am	Opening Speech by YBhg. Dato' Mohd Azizi Mohd Zain, Mayor of Majlis Bandaraya Petaling Jaya (MBPJ),
10.50am – 11.10am	<ul style="list-style-type: none"> • The Official Opening Ceremony of the 5th International Conference of Universal Design in the Built Environment 2017 (ICUDBE 2017) • Video Montage Presentation of ICUDBE 2017
11.10am – 11.30am	Morning Tea Break (MBPJ Press Conference)
	Session 1B: Theme Universal Design & Accessibility in Disaster Risk Management Moderator – Prof. Emeritus LAr. Dr. Ismawi Hj. Zen
11.30am – 11.50am	Keynote Speaker 2 – Mr. Neil Smith (BuroHappold Engineering, London, UK) <i>'Inclusive Design in London – BuroHappold Engineering'</i>
11.50am – 12.05pm	Presenter Risk 1 - 'Inclusive in Disaster Risk Management (DRM) for Bertam Valley Community' <i>Rahsidi Sabri Muda, Izawati Tukiman, Mohd Ramzi Mohd Hussain, Ismawi Zen</i>
12.05pm -12.20pm	Presenter Risk 2 – 'Concept of Privacy and Safety from Islamic Perspective in Flood Evacuation Centre'

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DESIGN IN THE BUILT ENVIRONMENT 2017

6TH - 7TH NOVEMBER 2017

	Wan Mohamad Amin W Seman and Asiah Abdul Rahim
12.20pm - 12.30pm	Q & A session 1A & 1B
12.30pm – 2.00pm	Lunch break
	Session 2A: Theme Universal Design & Accessibility in Social Moderator – En. Shamsul Bahrin Rahmat (Perbadanan Putrajaya)
2.00pm – 2.20pm	Keynote Speaker 3 – Pn. Hj. Sharipah Marhaini Syed Ali (Director of Development Planning Department, Majlis Bandaraya Petaling Jaya) 'The Implementation of A Barrier Free City / Universal Design by Local Authority: Petaling Jaya City Council's Experience'
2.20pm – 2.35pm	Invited speaker – Assoc. Prof. Dr. Ar. Mariam Jamaludin (UiTM) 'Universal Design for Public Buildings'
2.35pm – 2.50pm	Presenter Social 1 – 'Users Perception On Day Care Centre for Muslim Elderly' Nur Hafizah Ramli, Asiah Abdul Rahim
2.50pm – 3.05pm	Presenter Social 2 – 'Environmental Attitudes of urban dwellers in Kuala Lumpur, Malaysia' Zainul Mukrim Baharuddin, Nadia Rusli, Maheran Yaman, Rashidi Othman & Jasasikin Sani
3.05pm – 3.20pm	Presenter Social 3 – 'Classical Hybrid Language of Malay Palaces Identifying Generic And Variant Forms' Tengku Anis Qariah Raja Abdul Kadir, Puteri Shireen Jahn Kassim, Noor Hanita Abdul Majid and Norwina Binti Mohd.Nawawi
3.20pm - 3.35pm	Presenter Social 4 – 'Persons with Disabilities (Pwds) Access Requirements for Traditional Mosque in Melaka' Nur Amirah Abd Samad, Nor Haslina Ja'afar, Asiah Abdul Rahim
3.35pm – 3.45pm	Q & A Session 2A
3.45pm – 4.00pm	Tea break
	Session 2B: Theme Universal Design & Accessibility in Social Moderator – Prof. Dato' Sri Ar. Dr. Asiah Abd. Rahim
4.00pm – 4.20pm	Keynote Speaker 4 - Dr. Seree Nonthasoot (Representative of AICHR Thailand) 'Disability and Employment'
4.20pm – 4.35pm	Invited speaker - Pn. Sharifah Junidah Syed Omar (DBKL) 'Towards An Accessible Kuala Lumpur: Pedestrian Walkway & Public Spaces 'Kuldesignmonth 2017''
4.35pm – 4.50pm	Presenter Social 5 – 'Housing for Disable People: What do They Need?' Syakir Amir, Nasriah Samsudin, Mariana Mohamed Osman, Syahriah Bachok & Zakiah Ponrahono
4.50pm – 5.05pm	Presenter Social 6 – 'Perception of Public on Back Alley as Public Space in Klang Valley' Mohamad Ariff B. Mohamad Razali, Asiah Abdul Rahim
5.05pm – 5.20pm	Q & A Session 2B
5.20pm	Disperse
8.30pm-11.30pm	UD AWARD and UDPC2017 Award DINNER

Tuesday, 7th November 2017

8.30am – 9.00am	Registration of presenter/participant/speaker for day 2
	Session 3: Theme Universal Design & Accessibility in Education Moderator – Prof. Emeritus Dato' Ar. Dr. Elias Salleh (KAED, IIUM)
9.00am – 9.20am	Keynote Speaker 5 – Prof. Emeritus LAr. Dr. Ismawi Hj. Zen (<i>MEDIU, Shah Alam, Selangor</i>) 'Universal Design, Ethic and Value from Islamic Perspective'
9.20am – 9.35am	Invited speaker –Ar. Mumtazah Mustajab (Architect of Permata Kurnia Building) 'Architecture for Autism'
9.35am – 9.50am	Presenter Edu 1– 'Assessment on Learning with Nature in Preschool' <i>Syaida Farizah Saleh & Nurul Syala Abdul Latip</i>
9.50am – 10.05am	Presenter Edu 2 – 'Introduction to the Aleppine Polychrome Wooden Interiors During the Ottoman Time' <i>Rami Alafandi, Asiah Abdul Rahim</i>
10.05am – 10.15am	Presenter Edu 3 - 'Practical aspects of accessibility in the mainstream primary schools in Bangladesh: A case study assessment' <i>Md. Zaman Hossain, Asiah Abdul Rahim</i>
10.15am – 10.35am	Keynote Speaker 6 – Prof Dr Ruzita Mohd Amin (<i>Head DSU, IIUM</i>) 'Awareness for Universal Design & Accessibility in Malaysia'
10.35am – 10.45am	Q & A Session 3
10.45am – 11.05am	Morning tea break
	Session 4: Theme Universal Design & Accessibility in Advocacy Moderator – Prof. Sr. Dr. Khairuddin Abdul Rashid (KAED, IIUM)
11.05am – 11.20am	Keynote Speaker 7 – En. Shamsul Bahrin Rahmat (Perbadanan Putrajaya) 'Implementation, Monitoring and Enforcement on Universal Design Aspect in Putrajaya'
11.20am – 11.35am	Invited speaker - En. Pathmanathan (JPOKU, JKM) 'Universal Design in Malaysian Social Context'
11.35am – 11.50am	Presenter Adv 1 – 'The Effectiveness of Maintenance Management through Implementation of Building Maintenance Policy in Commercial High Rise Building' <i>Mohamad Ridzuan Yahya & Asiah Abdul Rahim</i>
11.50am – 12.05am	Presenter Adv 2 – 'Reviewing Save and Accessible City Requirement in Housing Project Abandonment in Malaysia' <i>Roziha Che Haron & Ismail Razali</i>
12.05pm – 12.20pm	Presenter Adv 3 – 'A Review on IBS Construction In Malaysia And Singapore' <i>Sara Latif Qureshi and Asiah Abdul Rahim</i>
12.20pm – 12.35pm	Presenter Adv 4 - 'Fire Safety: Natural Smoke Ventilation Design Requirements in Hospital Building' <i>Ab Ghani, M. Z. and Aripin, S.</i>
12.35pm – 12.45pm	Q & A Session 4
12.45pm – 02.30pm	Lunch Break

	Session 5A: Theme Universal Design & Accessibility in Health Moderator – En. Hussal Mizzar Hussain, Jabatan Standard Malaysia
2.30pm – 2.50pm	Keynote Speaker 8 - Dr. Ungku Ahmad Ameen Ungku Mohd. Zam (Hospital Ampuan Rahimah Klang) 'Physical Challenges of Older Person'
2.50pm – 3.05pm	Invited speaker - Tn. Hj. Mokhtar Jalil (Former MAS Cargo Officer)
3.05pm – 3.20pm	Presenter Health 1 – 'Assessment on seating posture relates to risk factors by using Chi-square test among elderly taxi drivers in Peninsular Malaysia' <i>Irwan Syah Md Yusoff, Ahmad Zuhairi Abdul Majid, Shamsul Bahri Mohd Tamrin</i>
3.20pm – 3.35pm	Presenter Health 2 – 'Identification of Indoor Airborne Pathogenic Microorganisms Species and Children Nasal Microorganism: The Prevalence of Airborne Microorganism with Respiratory Symptoms' <i>Shahidah, N., Syamzani A.M.D. & Mohd Shukri, M.A.</i>
3.35pm – 3.50pm	Presenter Health 3 – 'Altitudinal Zonated Moss as Bioindicators for Pollution' <i>Zainul Mukrim Baharuddin, Ainna Hanis Zuhairi, Khairusy Syakarim Has-Yun Hashim & Rashidi Othman</i>
3.50pm – 4.00pm	Q & A Session 5A
4.00pm – 4.15pm	Tea Break
	Session 5B: Theme Universal Design & Accessibility in Health Moderator – Prof Dr Ruzita Mohd Amin (Head DSU, IIUM)
4.15pm – 4.35pm	Keynote Speaker 9 – Prof Dato Sri Ar. Dr Asiah Abdul Rahim (KAED, IIUM) 'Transportation and Accessibility Person with Disabilities (PwDs) Plan of Action 2016-2022 Way Forward'
4.35pm – 4.50pm	Invited speaker - En. Francis John Ak Adam (SUHAKAM) 'Role of National Human Rights Institution (NHRI) on Advocacy for Accessibility and other Rights of Persons with Disabilities'
4.50pm – 4.50pm	Presenter Health 4 – 'Achieving Effective Wayfinding System For All In Primary Healthcare Environment' <i>Tahirah Zahirah Azman, Asiah Abdul Rahim</i>
4.50pm – 5.05pm	Presenter Health 5 – 'Inhalable and Respirable Dust Concentration of Soiled Stone, Metal and Ceramic Artefact inside National Museum Malaysia' <i>Shamzani Affendy Mohd Din, Nur Baiti Mat Husin and Rashidi Othman</i>
5.05pm – 5.15pm	Q & A Session 5B
5.15pm – 5.30pm	Closing Ceremony, Photography Session & Disperse



ALTITUDINAL ZONATIONED MOSS AS BIOINDICATORS FOR POLLUTION

Zainul Mukrim Baharuddin¹, Ainna Hanis Zuhairi¹, Khairusy Syakarin Has-Yun Hashim, Rashidi Othman¹
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

agenda

- Introduction
- Literature Review
- Problem Statement
- Research Question
- Purpose of Study
- Limitations
- Research Design
- Data Collection and Analysis
- Findings
- References

introduction

Tropical Montane Cloud Forest (TMCF)/Moss Forest

- A type of forest ecosystem that typically occur between 1 500 m and 3 000 m above sea level, situated within an altitude range of about 300 m. “forests that are frequently covered in cloud or mist” (Hamilton, 1995).

Bio-indicators

- Living organism that can be used to state the condition of the health level of an ecosystem (Poikolainen, 2004).

Biomonitoring

- Use of responses of certain individual plants species or plant associations at several biological organization levels (Kuang, et al., 2007).

Altitudinal Zonation

- Altitudinal zonation is used to account for the discontinuities associated with altitude in mountain areas (Lecompte M. and Alexandre F., 1996).

TMCF

Moss Forest

- The tropical montane cloud forest or also known as moss forest.
- Made of ecosystems with distinct floristic and structured form.
- It usually appears as a relatively narrow altitudinal zone where the atmospheric environment is persistent, frequent or seasonal cloud cover at the vegetation level.
- Surrounding cloud or wind-driven clouds propose more atmospheric connection through reduced solar radiation with vapour deficit, canopy wetting, and general suppression of evapotranspiration, (Hamilton et al., 1993).

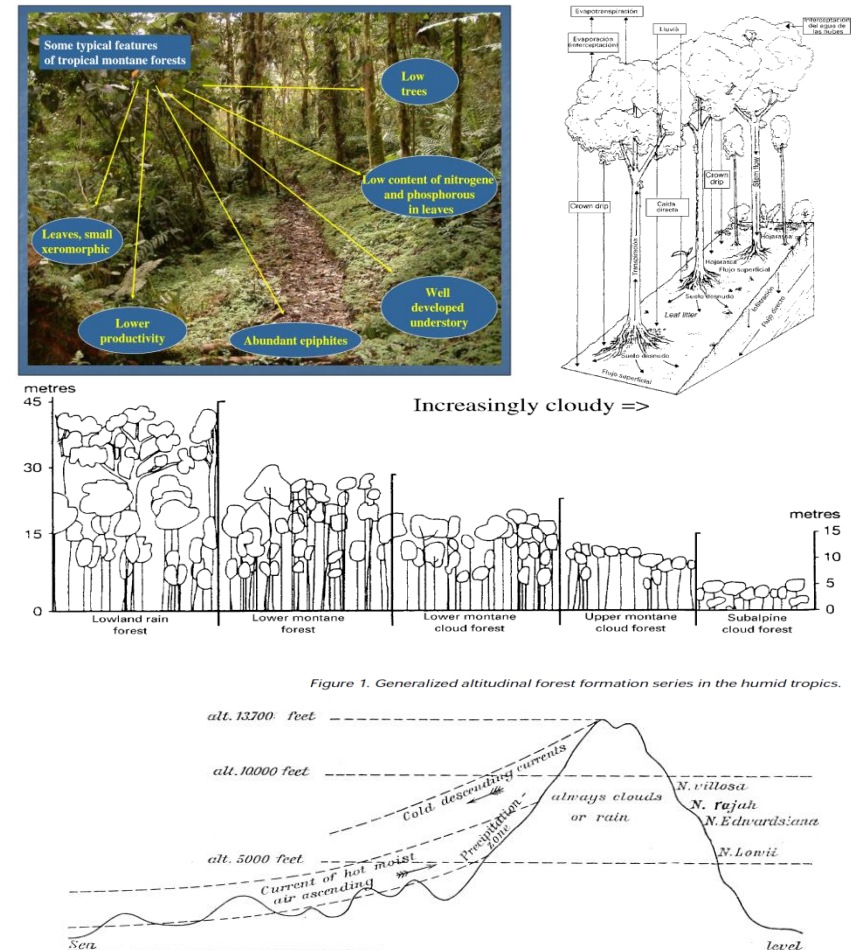
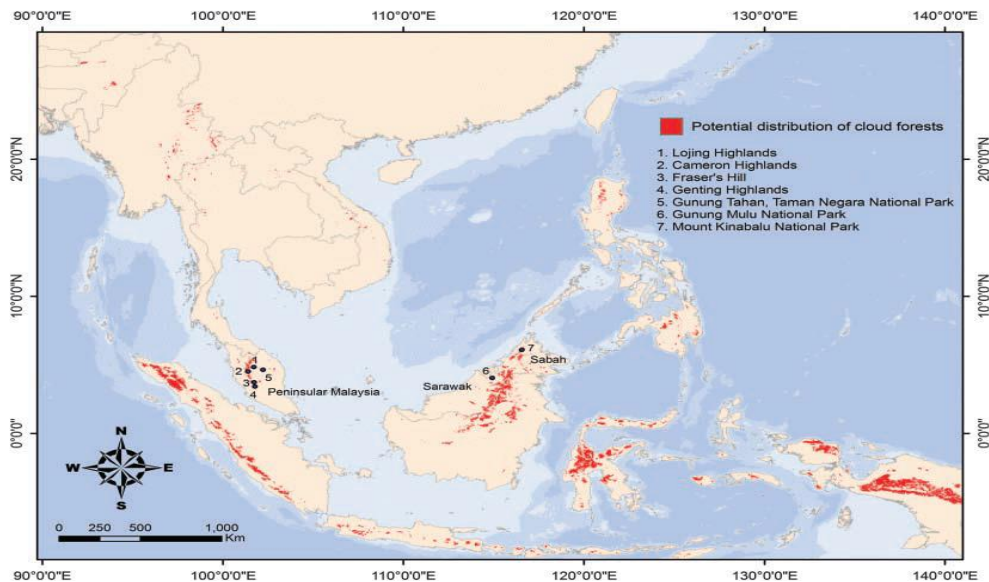


Fig. 42. Diagram showing hot and cold air currents on the sides of Mount Kina Balu in Borneo, meeting and condensing at the Nepenthes zone. (Adapted from Burbidge.)

(L.A Brujinzel, L.S Hamilton)

TMCF

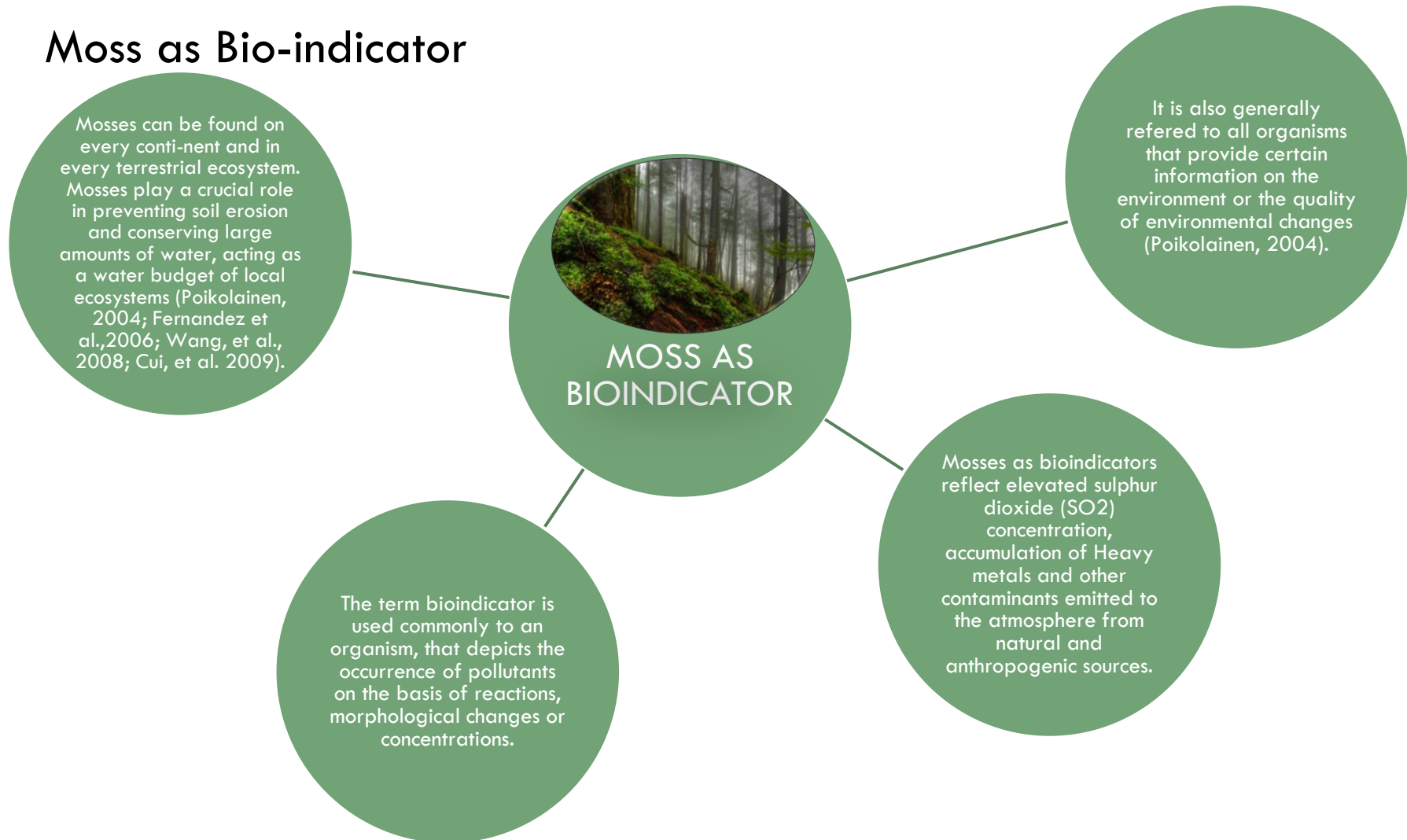
- Southeast Asia cloud forest contains more than half of Tropical Montane Cloud Forest around the world, an area of about 32 million hectares.
- In Malaysian mountains, cloud Forests usually are made of shorter trees with higher stem density that are of twisted branches and twigs, solid crowns, sclerophyllic leaves that are smaller in size.
- Malaysia's cloud forest, can be said to be some of the best-documented in the region.



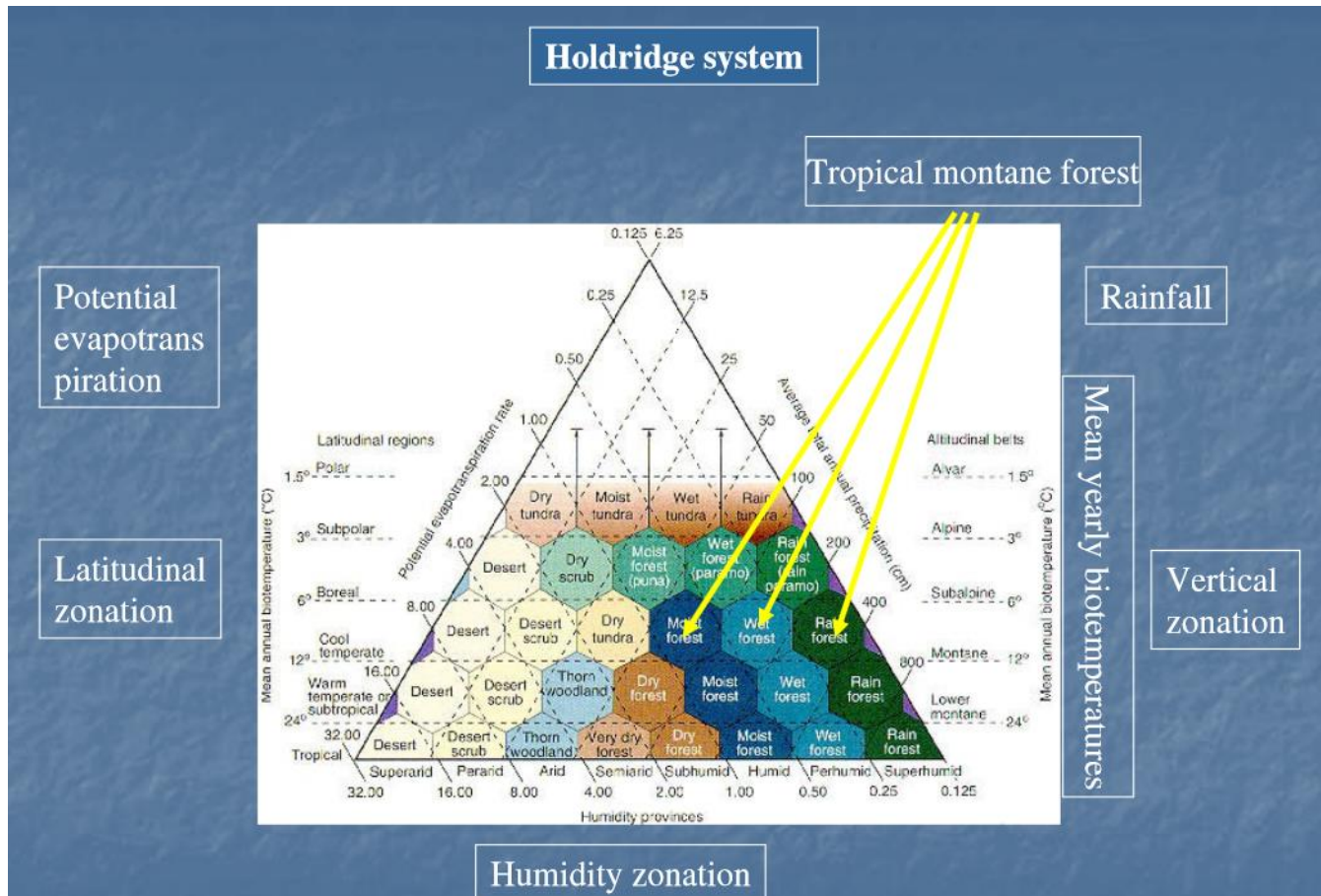
Potential distribution of tropical montane cloud forests in Southeast Asia and examples of cloud forests in Malaysia map by the United Nations Environment Programme World Conservation Monitoring Centre

literature review

Moss as Bio-indicator



Altitudinal zonation



(Holdridge, 1996)

problem statement

TMCF
Influence and
dominant
species of
mosses.

Types of
species of
moss found,
its physical
attributes
and it's
susceptibility.

Type and
level of
pollution of
local areas.

research question and purpose of study

Research Question:

- What are the landscape characters and ecosystem of Tropical Montane Cloud Forest (TMOF) or “Moss Forest”?
- What are moss, its species and using it as bio indicators?
- What are the types of pollution that exist and its effects?
- What are the environmental impacts to the disappearance of the Moist Forest Ecosystem?

Purpose of Study

- To further understand the effect of human interaction with the ecosystem of Tropical Montane Cloud Forest using moss as bio indicators through Bio Monitoring .

Limitations/Threats

- The definition of moss forests is **controversial and unsure**, as it is **difficult to make a definite distinction** between true “moss forest” and general montane rain forest.
- Ecosystems and biodiversity of Southeast Asia Moss Forest are **seriously imperilled** and **extremely volatile**.
- Cloud forest is **proven** or are known to be of the **world's most endangered ecosystems**.
- Over the past 20 years, **cloud forests worldwide have been disappearing at nearly twice the rate of average global deforestation** is becoming a critical issue which the trend has been recognised and admitted by the UN Intergovernmental Forum on Forests (Aldrich *et al.*, 2001).

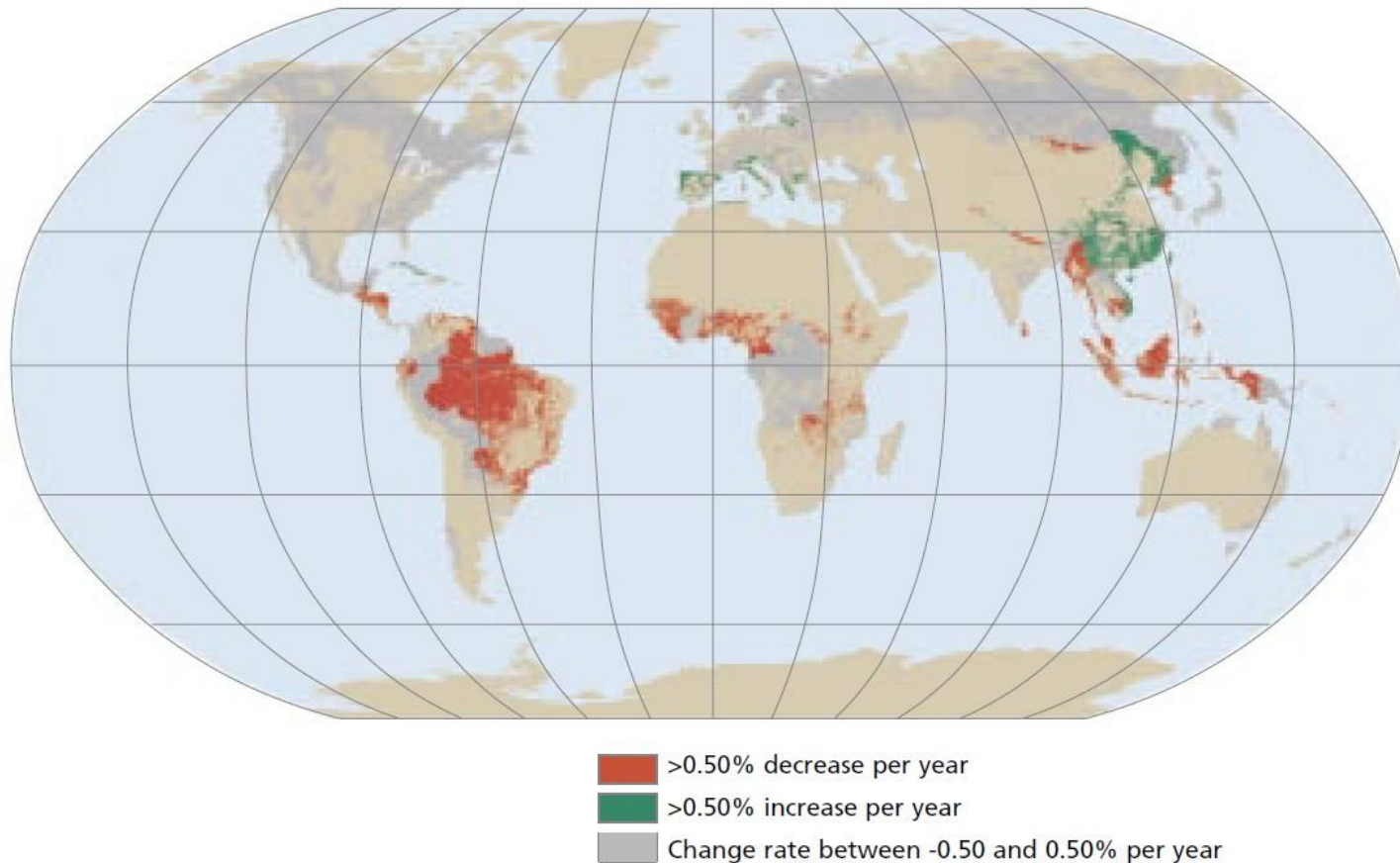
Limitations/Threats

- Studies on forest clouds accounted for **only 5 percent** of the total biodiversity research in Southeast Asia, compared with 74 percent for lowland forest, their **rate of loss exceeds that of lowland tropical forest in an even faster rate.**
- Annual **forest loss** in the hills and tropical mountains is **23 percent faster** compared with lowland tropical forests and much **less publicised.**
- Tropical Montane Cloud forests in the northern Andes, **90 percent are already gone.**

Tropical montane cloud forest cover and deforestation rates in 10 Southeast Asian countries.				
Country	Forest cover (thousand hectares)		Annual percent deforestation rate 2000–05	
	Total	Cloud (above 1200 meters)	Total forest cover	Primary forest cover
Brunei Darussalam	442	7	–0.69	–5.88
Burma	34,419	4324	–1.35	n/a
Cambodia	9335	72	–1.90	–2.59
Indonesia	104,986	19,503	–1.61	–3.05
Lao PDR	12,561	913	–0.45	n/a
Malaysia	19,292	2361	–0.65	n/a
Philippines	5789	898	–1.98	n/a
Thailand	14,762	2771	–0.40	–0.7
Timor-Leste	507	n/a	n/a	n/a
Vietnam	9819	1533	2.06	–1.14

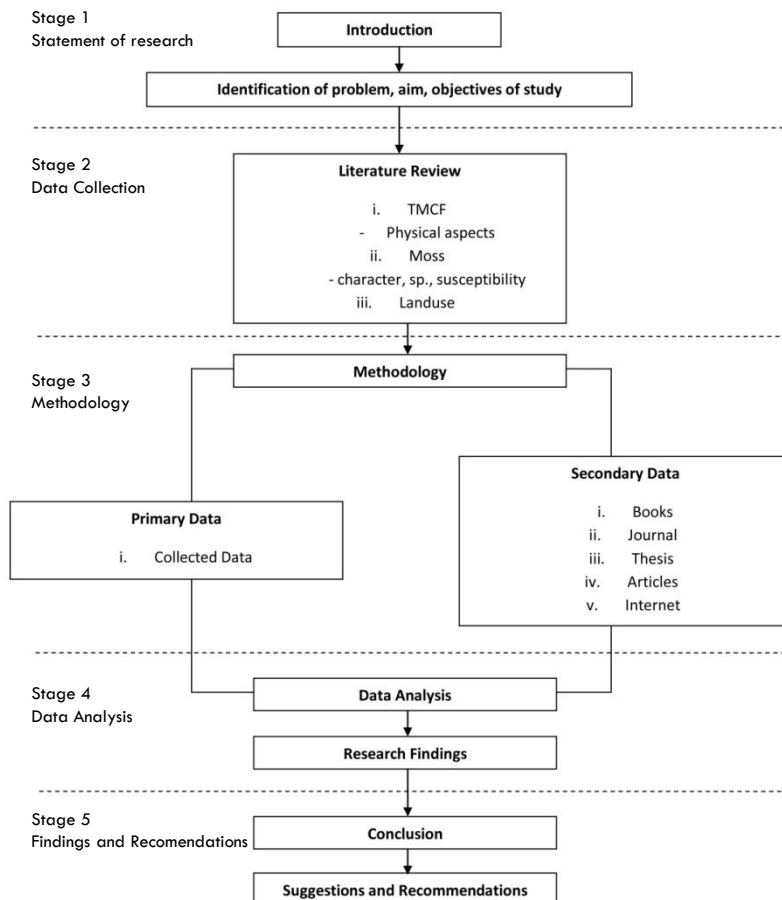
Limitations/Threats

Countries with large net changes in forest area 2000–2005



research design

Methodology



- ❑ Quantitative research.
- ❑ Dependent Variables:
 - Vegetation Character
 - Moss Species
 - Micro Climate
- ❑ Independent Character:
 - Altitude
 - Zone
 - Landuse

Instrumentation

Researcher-completed instrument

- ❑ Moss species (Observation)
- ❑ Pollution Level (Experimentation)
- ❑ Type of pollution (Experimentation)

data collection, analysis and setting

Data collection:

- Random sampling
- Air drying
- Microwave digester
(Spectrophotometer)

Data analysis using:

- Anova/Linear regression
- Pearson product moments
corellation
- SPSS statistical package

Setting:

- Fraser's hill, Pahang
- Cameron Highlands, Pahang

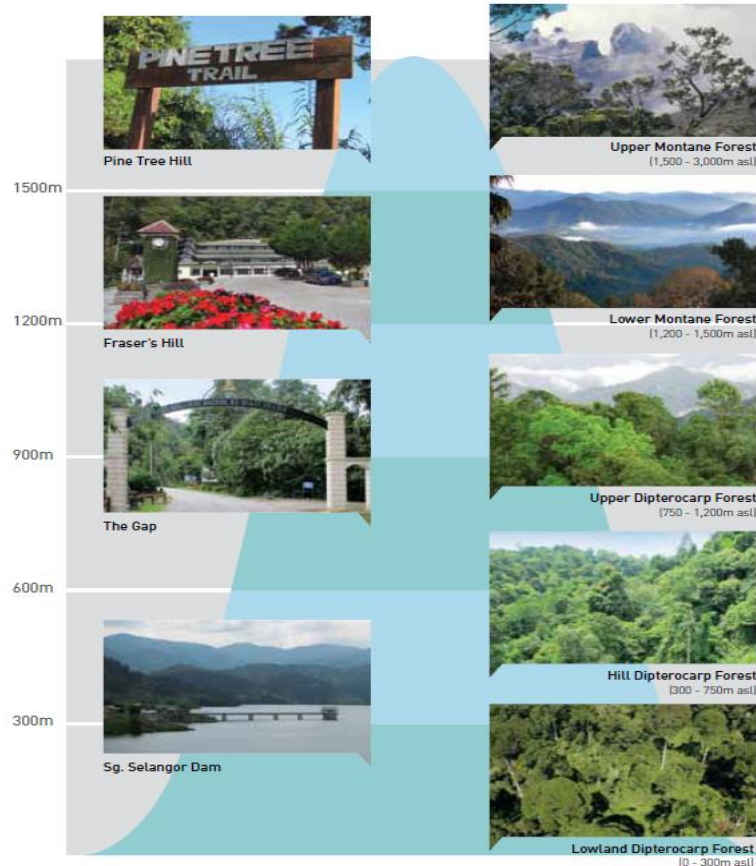


location and findings

Location

□ Fraser Hill (Pahang)

CHANGE OF VEGETATION ZONES WITH ALTITUDE



Findings

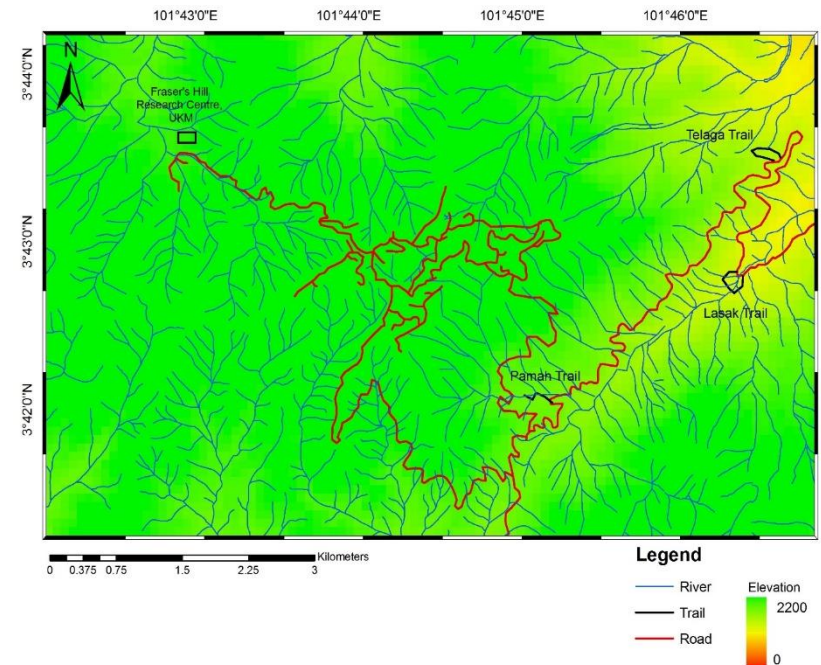
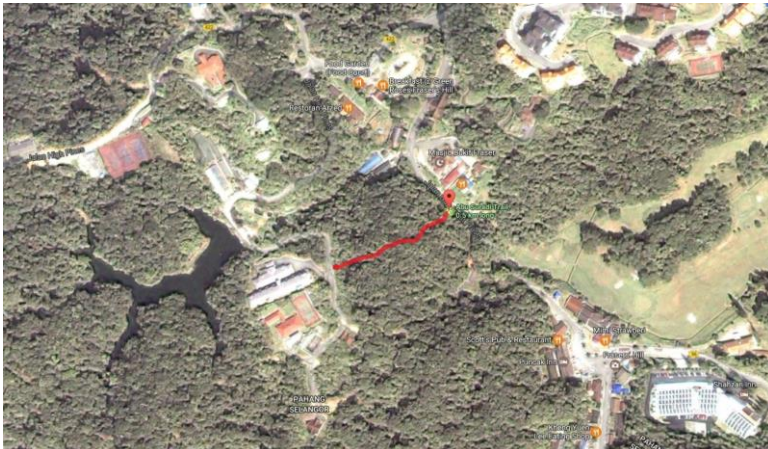
- when the altitude incline so will its humidity but the temperature would be the opposite.
- The highest altitude of Pamah trail have recorded 23.2°C at the altitude 828m, Pamah trail 20°C (1232m) and The Abu Suradi Trail 19.6°C (1279).
- The species namely found at Abu Suradi trail and Pamah trail are *I. Minutirameum*, *Plagiothecium miquelii*, *T. singaporense* and *Taxi thelium isocladum*.

location and findings

Pamah Trail

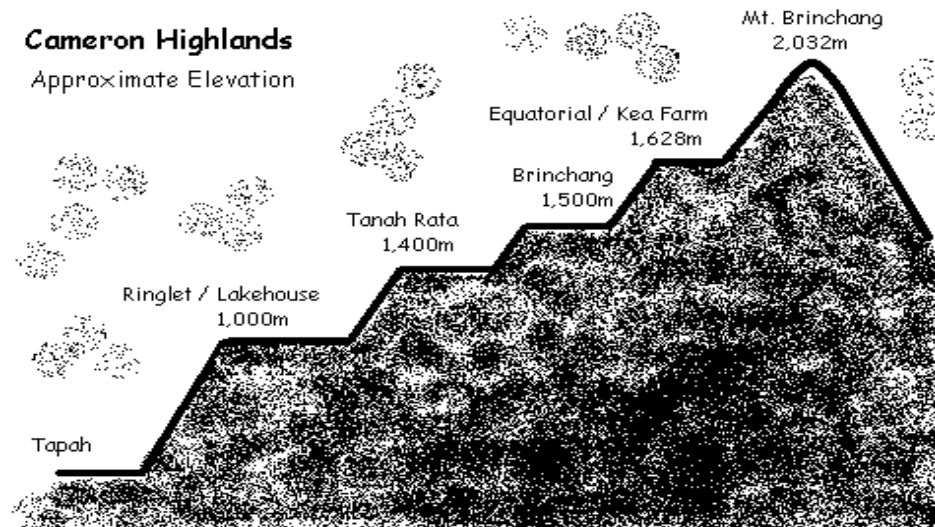


Abu Suradi Trail



location and findings

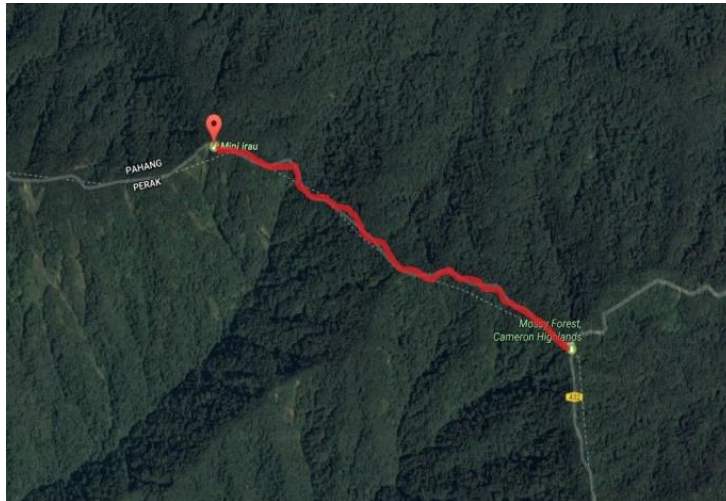
Location



Findings

- Cameron Highlands are nestled at elevations from 1,100 meters (3,600 ft) up to 1,600 meters (5,200 ft) above sea level
- Mean annual temperature of 18 °C (64 °F).
- Temperature seldom rises over 25°C (77 °F) during the day while at night, it rarely drops to 9 °C (48 °F) only at the higher elevations.

location and findings



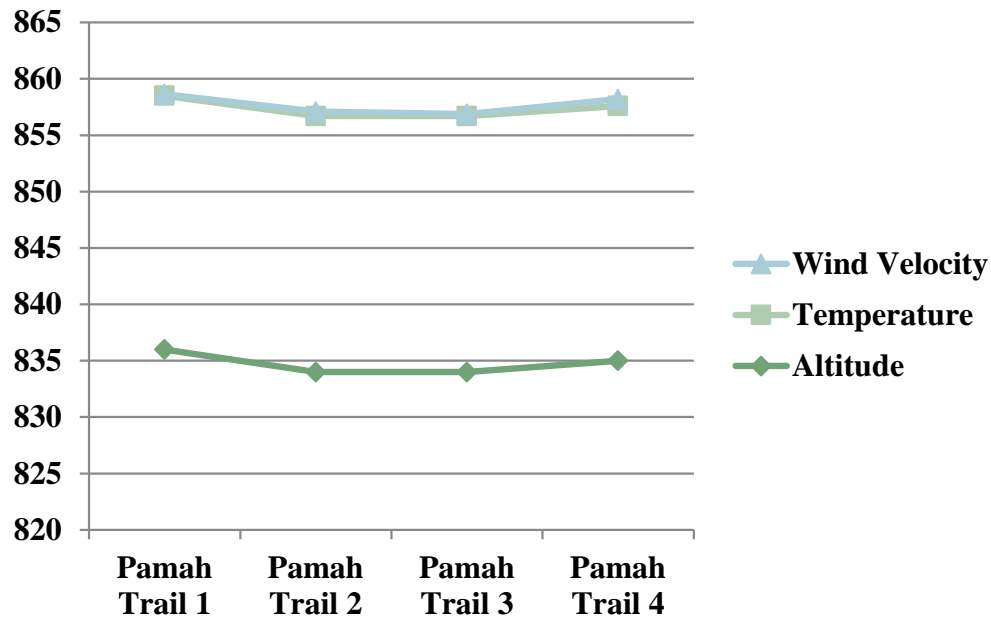
Brinchang and Mini Irau Trail



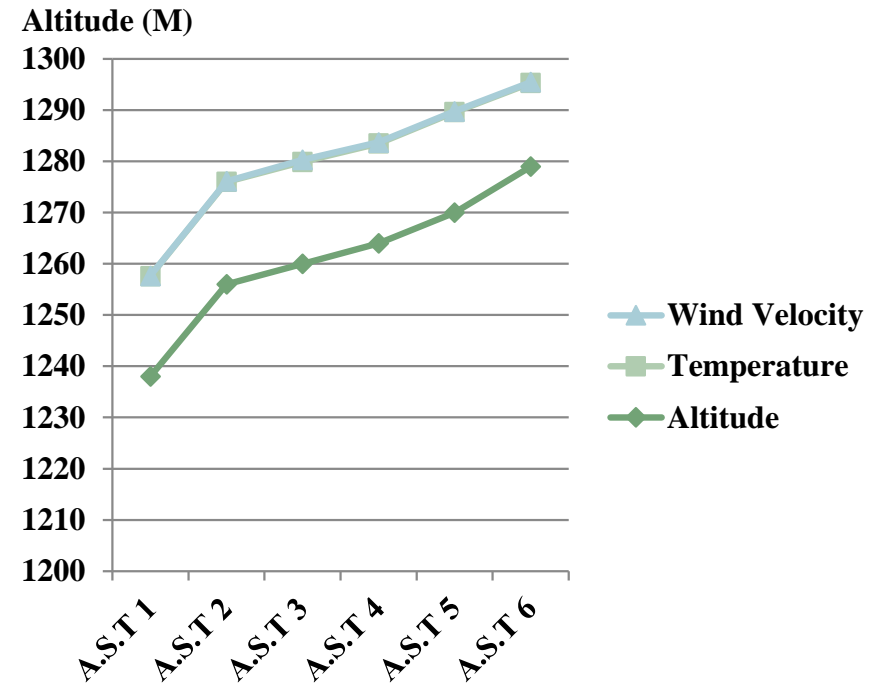
findings

Microclimate x Altitude

Pamah Trail

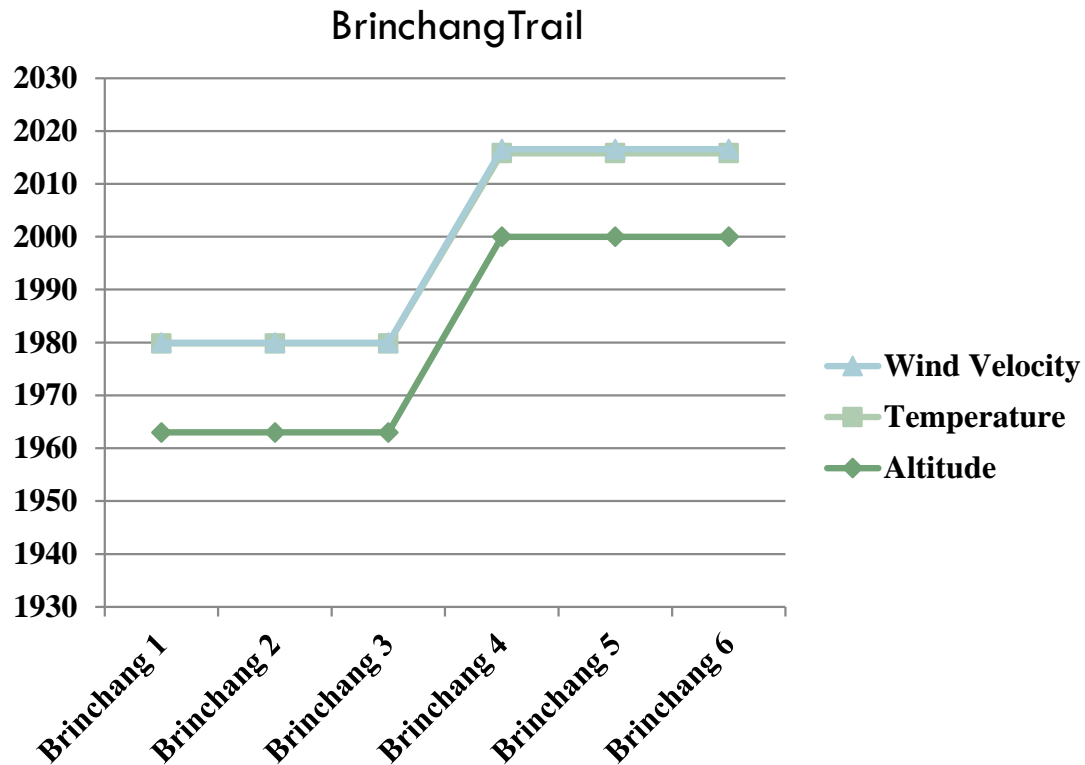


Abu Suradi Trail



findings

Microclimate x Altitude



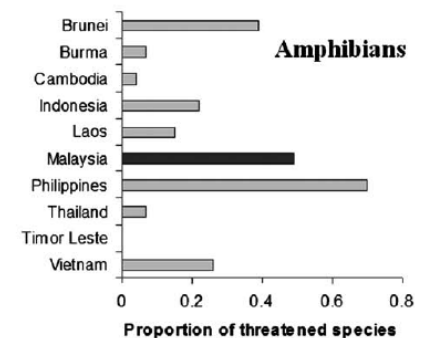
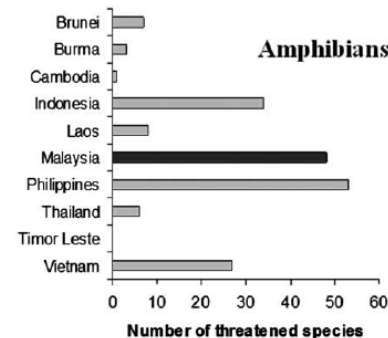
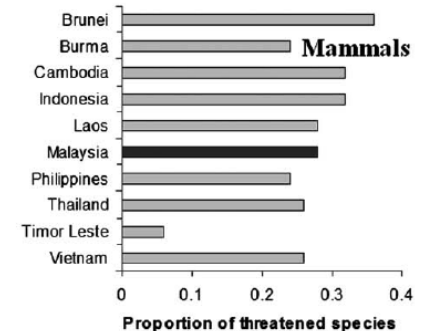
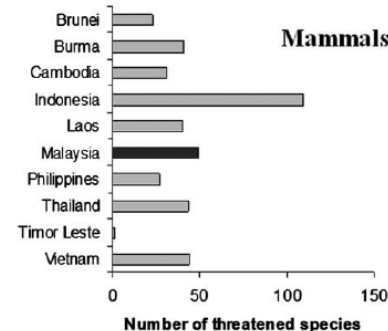
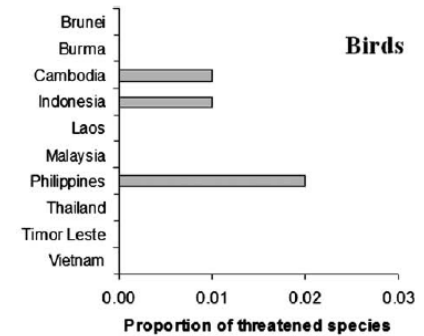
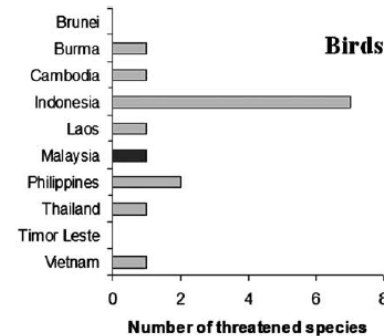
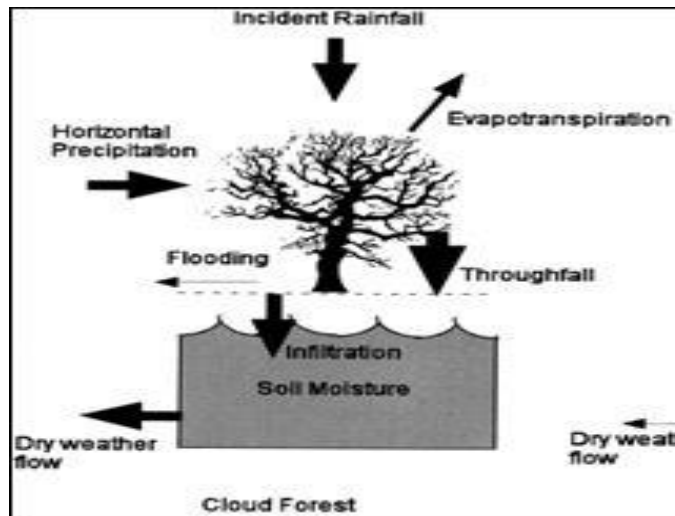
findings

Heavy Metals	Pamah Trail			Abu. S Trail			Brinchang Trail			M.Irau Trail			Toxicity Level
	Total	Mg/Kg	SD	Total	Mg/Kg	SD	Total	Mg/Kg	SD	Total	Mg/Kg	SD	
Al	535.243	44.604	± 39.907	334.142	18.563	± 14.66	106.592	5.922	± 6.572	152.938	16.993	± 17.916	71000.000
Cr	0.083	0.007	± 0.007	0.000	0.000	± 0	3.111	0.173	± 0.424	2.044	0.227	± 0.324	0.049
Mn	7.459	0.622	± 0.286	5.245	0.291	± 0.246	2.727	0.152	± 0.038	0.608	0.068	± 0.034	600.000
Fe	279.529	23.294	± 20.513	146.569	8.143	± 6.77	84.410	4.689	± 4.951	74.404	8.267	± 8.154	250.000
Co	0.038	0.003	± 0.002	0.017	0.001	± 0.001	0.062	0.003	± 0.006	0.041	0.005	± 0.005	8.000
Ni	0.340	0.028	± 0.026	0.159	0.009	± 0.005	1.961	0.109	± 0.207	1.495	0.166	± 0.195	40.000
Cu	0.265	0.022	± 0.015	0.502	0.028	± 0.028	0.000	0.000	± 0	0.000	0.000	± 0.000	30.000
Zn	5.748	0.479	± 0.167	8.785	0.488	± 0.14	7.539	0.419	± 0.178	3.793	0.421	± 0.145	50.000
Pb	0.392	0.033	± 0.025	0.152	0.008	± 0.011	0.092	0.005	± 0.008	0.136	0.015	± 0.018	0.050

Heavy metal total, average and standard deviation quantity.

Advantagous of study

- Moss as the **cheapest and simplest** environmental indicators for monitoring the heavy metal concentrations in the atmosphere.
- Can create **proper framework o guidelines** for the type of forest.
- Create **awareness** on the ecosystem.



IUCN red list of threatened sp.

conclusion

- The microclimate and altitude of the area has impact and creates the opportunity for cloud forest/TMCF to exist.
- The microclimate has direct impact on the vegetation characteristic.
- The heavy metal content within the samples are non toxic except for Chromium.

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